

*The
Economic Review*
November 2002

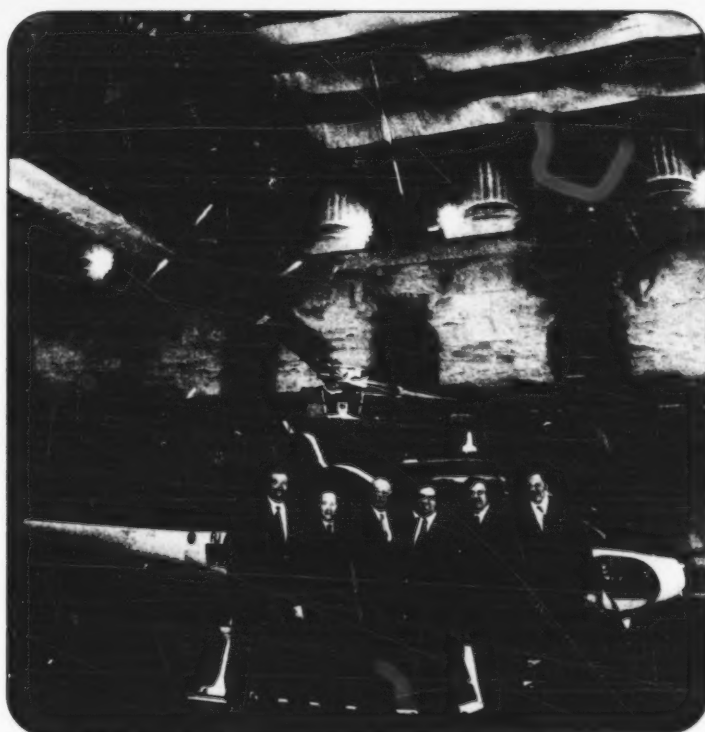
Newfoundland and Labrador



GOVERNMENT OF
NEWFOUNDLAND AND LABRADOR

Table of Contents

United States and Canadian Economies . . .	1
Provincial Economic Overview	2
Labour Markets	3
Productivity	4
Oil and Gas	5
Mining	6
Gull Island Hydro Project	7
Manufacturing	8
Special Feature - R&D	9
Fishery	10
Tourism	11
Construction	12
Forestry and Agrifoods	13



Credit: New York Stock Exchange
CHC Lands on the Big Board Shares of CHC Helicopter Corporation began trading on the New York Stock Exchange on Friday, October 11, 2002. CHC, based in St. John's, is one of the world's leading offshore helicopter services companies. Left to right, the CHC executive team: David Dobbin, Vice President; Jo Mark Zurel, CFO; Craig L. Dobbin, O.C., CEO; Sylvain Allard, President; Noel Clarke, Senior Vice President and Craig C. Dobbin, Vice President.

Cover Photos:

Top left:

White Rose Module Steel Fabrication, Marystown - *Courtesy of Husky Energy*

Top right:

Model testing Terra Nova FPSO at the Institute for Marine Dynamics, St. John's - *Eric Walsh*

Bottom left:

Carnival Legend, St. John's Harbour - *Unknown*

Bottom right:

Voisey's Bay Construction Site - *Voisey's Bay Nickel Company Limited*

The Economic Review is published annually by the Government of Newfoundland and Labrador under the authority of: The Honourable Joan Marie Aylward, Minister of Finance and President of Treasury Board. All data is current as of November 8, 2002.

Comments and questions concerning *The Economic Review* should be directed to:

Economics and Statistics Branch
 (Economic Research and Analysis)
 Department of Finance
 P.O. Box 8700
 St. John's, Newfoundland
 A1B 4J6
 Telephone: (709) 729-3255
 Facsimile: (709) 729-6944
 e-mail: infoera@gov.nf.ca

Copies of *The Economic Review* can be obtained by contacting:

Office of the Queen's Printer
 Telephone: (709) 729-3649
 Facsimile: (709) 729-1900
 e-mail: queensprinter@gov.nf.ca

The Economic Review is also available on the Internet at the Government of Newfoundland and Labrador web site:

www.gov.nf.ca

under *Publications* and also on the Economic Research and Analysis site:

www.economics.gov.nf.ca/review2002

ISSN 1208-9982



Visit Our Web Site: www.economics.gov.nf.ca/review2002

United States and Canadian Economies

United States

Real GDP in the U.S. is expected to grow by about 2.5% in 2002, however, growth will stem primarily from gains made early in the year as the economy has slowed in recent months.

While economic activity rebounded strongly in the first quarter of 2002, fuelled by consumer spending, recent data have given rise to concerns about the pace and momentum of the economic recovery. Job creation and consumer confidence has waned in recent months, financial markets have declined, business profits remain weak, business investment remains low, and the U.S. dollar has depreciated relative to other major currencies.

Uncertainty over the pace of the U.S. recovery has kept interest rates low. The U.S. Federal Reserve target rate is at a 40 year low of 1.25%. Low interest rates and a rebound in business investment is expected to boost economic growth to roughly 3% in 2003.

Canada

Canadian real GDP is expected to grow by around 3.5% in 2002, up considerably from 1.5% last year. While the

economy slowed in 2001, GDP contracted in only one quarter, thereby technically avoiding a recession. Like the U.S. Federal Reserve Board, the Bank of Canada acted aggressively throughout the 2001 slowdown, lowering interest rates to 40 year lows.

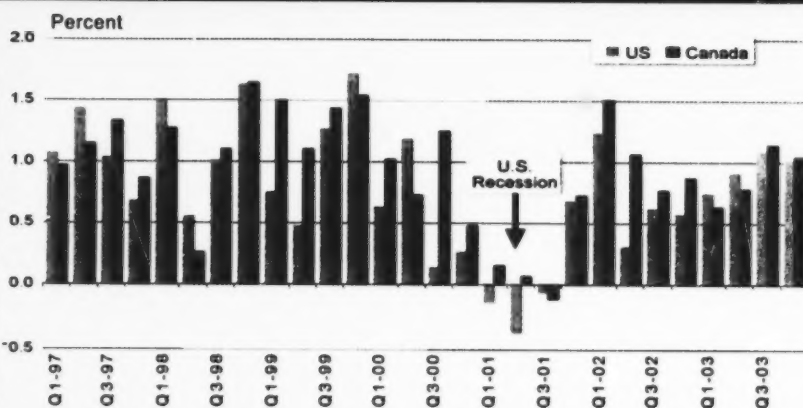
Canadian real GDP growth has been strong in the first half of 2002 and seasonally adjusted employment was up almost 460,000 in the first ten months. Spending on big ticket items like auto-

mobiles and housing have been the key drivers of growth.

In response to the strong pace of growth and to keep inflationary pressure in check, the Bank of Canada has increased the key interest rate to date by 0.75 percentage points to 2.75%. However, recent weakness in the U.S. economy will likely mean that the Bank will not raise interest rates any further in the short term.

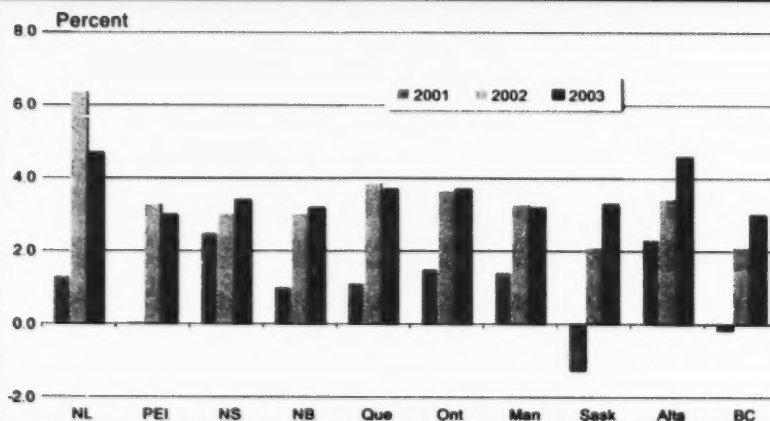
Canada's economy is expected to continue to expand strongly in 2003. Real GDP is anticipated to grow by 3.5% again next year. On a provincial basis, private sector forecasters are predicting that most provinces will post strong real GDP growth in 2002 and 2003. Newfoundland and Labrador is expected to outpace all provinces in both years.

Quarterly real GDP growth
1997-2003f



Source: Statistics Canada; Conference Board of Canada

Real GDP growth by province



Source: Statistics Canada (2001); Average of private sector forecasters (2002 and 2003)

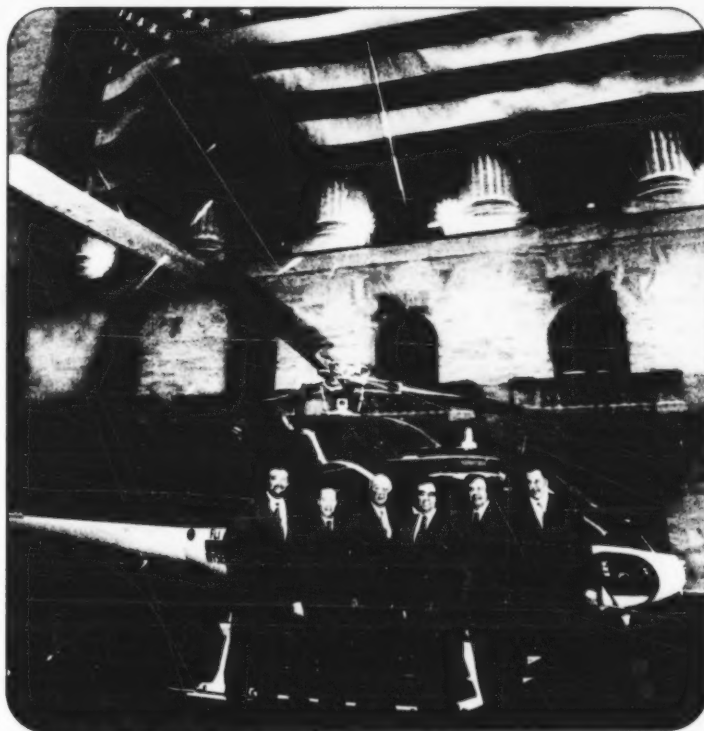
Visit Our Web Site

Which web sites are used by economic analysts for the latest information on the Canadian and global economies?

Visit: www.economics.gov.nf.ca/mnlinks.asp

Table of Contents

United States and Canadian Economies . . .	1
Provincial Economic Overview	2
Labour Markets	3
Productivity	4
Oil and Gas	5
Mining	6
Gull Island Hydro Project	7
Manufacturing	8
Special Feature - R&D	9
Fishery	10
Tourism	11
Construction	12
Forestry and Agrifoods	13



Credit: New York Stock Exchange

CHC Lands on the Big Board Shares of CHC Helicopter Corporation began trading on the New York Stock Exchange on Friday, October 11, 2002. CHC, based in St. John's, is one of the world's leading offshore helicopter services companies. Left to right, the CHC executive team: David Dobbin, Vice President; Jo Mark Zurel, CFO; Craig L. Dobbin, O.C., CFO; Sylvain Allard, President; Noel Clarke, Senior Vice President and Craig C. Dobbin, Vice President.

Cover Photos:

Top left:

White Rose Module Steel Fabrication, Marystown - *Courtesy of Husky Energy*

Top right:

Model testing Terra Nova FPSO at the Institute for Marine Dynamics, St. John's - *Eric Walsh*

Bottom left:

Carnival Legend, St. John's Harbour - *Unknown*

Bottom right:

Voisey's Bay Construction Site - *Voisey's Bay Nickel Company Limited*

The Economic Review is published annually by the Government of Newfoundland and Labrador under the authority of: The Honourable Joan Marie Aylward, Minister of Finance and President of Treasury Board. All data is current as of November 8, 2002.

Comments and questions concerning *The Economic Review* should be directed to:

Economics and Statistics Branch
(Economic Research and Analysis)
Department of Finance
P.O. Box 8700
St. John's, Newfoundland
A1B 4J6
Telephone: (709) 729-3255
Facsimile: (709) 729-6944
e-mail: infoera@gov.nf.ca

Copies of *The Economic Review* can be obtained by contacting:

Office of the Queen's Printer
Telephone: (709) 729-3649
Facsimile: (709) 729-1900
e-mail: queensprinter@gov.nf.ca

The Economic Review is also available on the Internet at the Government of Newfoundland and Labrador web site:

www.gov.nf.ca

under *Publications* and also on the Economic Research and Analysis site:

www.economics.gov.nf.ca/review2002

ISSN 1208-9982



**ECONOMICS
& STATISTICS**

Visit Our Web Site: www.economics.gov.nf.ca/review2002

United States and Canadian Economies

United States

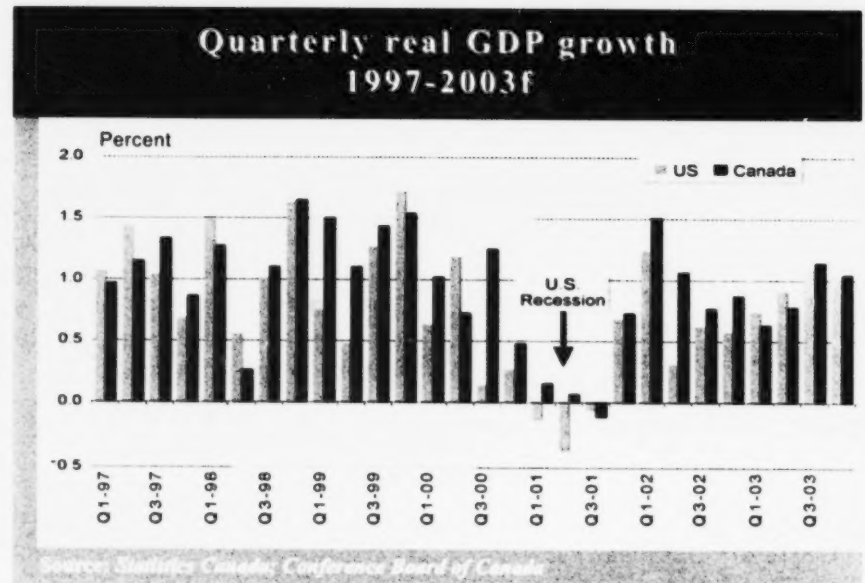
Real GDP in the U.S. is expected to grow by about 2.5% in 2002, however, growth will stem primarily from gains made early in the year as the economy has slowed in recent months.

While economic activity rebounded strongly in the first quarter of 2002, fuelled by consumer spending, recent data have given rise to concerns about the pace and momentum of the economic recovery. Job creation and consumer confidence has waned in recent months, financial markets have declined, business profits remain weak, business investment remains low, and the U.S. dollar has depreciated relative to other major currencies.

Uncertainty over the pace of the U.S. recovery has kept interest rates low. The U.S. Federal Reserve target rate is at a 40 year low of 1.25%. Low interest rates and a rebound in business investment is expected to boost economic growth to roughly 3% in 2003.

Canada

Canadian real GDP is expected to grow by around 3.5% in 2002, up considerably from 1.5% last year. While the



economy slowed in 2001, GDP contracted in only one quarter, thereby technically avoiding a recession. Like the U.S. Federal Reserve Board, the Bank of Canada acted aggressively throughout the 2001 slowdown, lowering interest rates to 40 year lows.

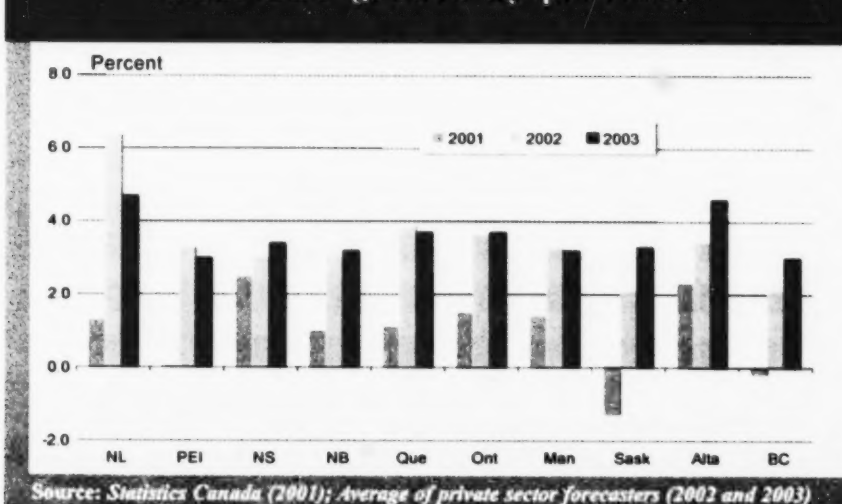
Canadian real GDP growth has been strong in the first half of 2002 and seasonally adjusted employment was up almost 460,000 in the first ten months. Spending on big ticket items like auto-

mobiles and housing have been the key drivers of growth.

In response to the strong pace of growth and to keep inflationary pressure in check, the Bank of Canada has increased the key interest rate to date by 0.75 percentage points to 2.75%. However, recent weakness in the U.S. economy will likely mean that the Bank will not raise interest rates any further in the short term.

Canada's economy is expected to continue to expand strongly in 2003. Real GDP is anticipated to grow by 3.5% again next year. On a provincial basis, private sector forecasters are predicting that most provinces will post strong real GDP growth in 2002 and 2003. Newfoundland and Labrador is expected to outpace all provinces in both years.

Real GDP growth by province



Visit Our Web Site

Which web sites are used by economic analysts for the latest information on the Canadian and global economies?

Visit: www.economics.gov.nf.ca/mnl/links.asp

Provincial Economic Overview

2002 Performance

Fueled by strong growth in exports and continuing high levels of consumer demand, the economy is on track for a solid performance again this year. Real Gross Domestic Product (GDP) is expected to expand by 7.5%, outpacing the Budget forecast of 3.7%. This will be the fourth time in five years that real economic growth has exceeded 5%, and the third year that the province's growth will lead the country.

Exports are expected to grow significantly this year, primarily due to increased oil production. While oil production was projected to be quite strong (up 60%) at Budget time, current expectations are that production will almost double that of 2001. Increased iron ore production and fish products are also contributing to export growth.

Consumption growth is expected to be strong in 2002. Retail sales in the first eight months of the year totaled \$3.3 billion, an increase of 3.0% over the same period in 2001, supported by continued employment and income gains. In addition, housing starts are expected to hit the highest level in eight years.

Employment during the first ten months of 2002 was 1.6% higher than the same

period last year and labour income, a key component of personal income, totaled \$3.3 billion in the first six months of the year, 6.2% higher than the first half of 2001.

While most indicators reflect an improving economic situation, the population continues to fall. As of July 1, 2002 the population stood at 531,600 persons, a drop of 0.4%. This is, however, the lowest annual rate of decline recorded since population starting falling in 1994.

Provincial Comparisons

Recent economic growth has allowed the province to gain ground relative to other provinces in terms of per capita measures of well-being. In 2001, Newfoundland and Labrador's per capita real GDP was 95.6% of the Maritime average and 71.5% of the Canadian average. This represented gains of 8.9 and 6.9 percentage points, respectively, since 1997. Similarly, personal income per capita rose from 75.4% of the Canadian average in 1997 to 77.0% in 2001, and from 88.6% of the Maritime average to 89.2% in 2001.

2003 Outlook

Strong economic growth is expected to continue in 2003. On average, private

Economic Indicators

(Annual % change unless otherwise indicated)

	2001	2002f
Gross Domestic Product		
Nominal	-0.1	13.0
Real	1.3	7.5
Personal Income		
Nominal	3.6	4.3
Real	2.5	2.5
Personal Disposable Income		
Nominal	3.8	3.9
Real	2.7	2.1
Retail Sales		
Nominal	9.3	2.9
Real	8.9	1.2
Housing Starts	22.5	23.6
Employment	3.3	1.3
Labour Force	2.6	2.0
Unemployment Rate (%)	16.1	16.7
Population	-0.8	-0.4

f: forecast, Department of Finance, October 2002
Source: Department of Finance; Statistics Canada

sector forecasters are expecting real GDP growth of 4.7%, the strongest among provinces. Investment is expected to fuel growth next year, driven by Voisey's Bay development and White Rose construction.

Visit Our Web Site

for regularly updated forecasts

GDP

www.economics.gov.nf.ca/frcstGDP.asp

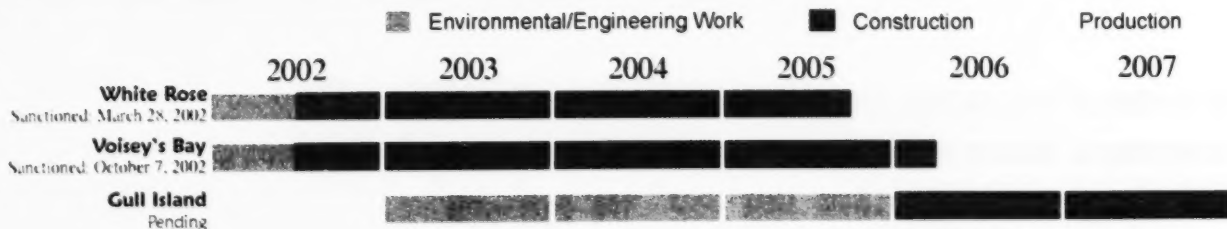
Employment

www.economics.gov.nf.ca/frcstEmp.asp

Selected Indicators

www.economics.gov.nf.ca/frcstSel.asp

Major Project Development



Gull Island hydro electricity production scheduled to commence in late 2011 or 2012

Source: Various sources including Department of Finance

Labour Markets

Labour markets have been on a roller coaster ride this past decade. Employment, after peaking in 1990 at 207,400, fell to 187,000 in 1996. This decline reflected the collapse of the groundfish fishery and government fiscal restraint.

Between 1996 and 2001, employment grew by 13% to a new peak of 211,300 and the unemployment rate fell 3.2 percentage points to 16.1%. This resurgence was led by oil production, fisheries diversification, the emergence of customer contact centres, retail trade, and other general service sector growth.

This period of employment growth, coupled with a decline in the population aged 15+, caused the employment rate (employment as a percent of the population aged 15+) to grow from 42.1% in 1996 to 48.1% in 2001.

The participation rate (those active in the labour force as a percent of the population aged 15+) also trended upward and averaged 57.3% in 2001 compared to a decade low of 52.1% in 1996. This suggests that increased labour demand since 1996 was mostly met by an increase in the labour force. The female participation rate grew faster than the male rate between



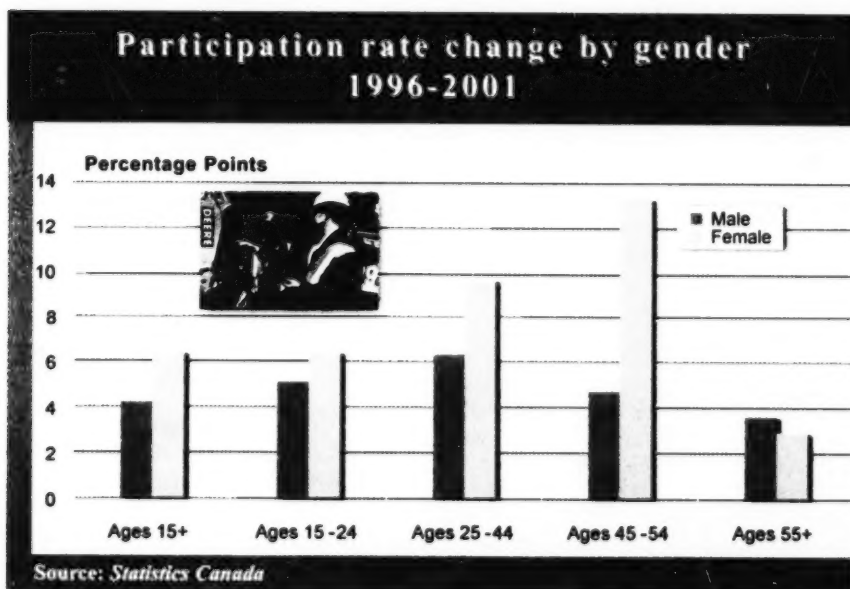
1996 and 2001. Almost 60% of the gain in employment over this period accrued to females and most growth occurred in the services sector where females account for the majority of workers.

While all regions of the province have benefited from the recent period of growth, some areas have benefited more than others. Employment in the greater St. John's area, for example, is at a record high, however, two areas (South Coast-Burin and Notre Dame-Central Bonavista

Bay) have not seen employment return to the peak levels of the early 1990s. The unemployment rate in the St. John's area, which is generally lower than other Labour Force Survey regions in the province, averaged 9.1% in 2001.

2002 Performance

During the first ten months of 2002 employment in the province was up 1.6% compared to the same time last year. Over this period, however, the province's labour force gains (2.2%) outpaced employment growth. Consequently, the unemployment rate increased 0.4 percentage points, from 16.4% during the first ten months of 2001 to 16.8% in 2002. An increase in the unemployment rate during expansionary times is not uncommon as the province's labour force has, in the past, demonstrated flexibility, expanding and contracting in line with changes in employment.



Visit Our Web Site

For regular updated employment commentaries:
www.economics.gov.nf.ca/indEmp.asp

Provincial Economic Overview

2002 Performance

Fueled by strong growth in exports and continuing high levels of consumer demand, the economy is on track for a solid performance again this year. Real Gross Domestic Product (GDP) is expected to expand by 7.5%, outpacing the Budget forecast of 3.7%. This will be the fourth time in five years that real economic growth has exceeded 5%, and the third year that the province's growth will lead the country.

Exports are expected to grow significantly this year, primarily due to increased oil production. While oil production was projected to be quite strong (up 60%) at Budget time, current expectations are that production will almost double that of 2001. Increased iron ore production and fish products are also contributing to export growth.

Consumption growth is expected to be strong in 2002. Retail sales in the first eight months of the year totaled \$3.3 billion, an increase of 3.0% over the same period in 2001, supported by continued employment and income gains. In addition, housing starts are expected to hit the highest level in eight years.

Employment during the first ten months of 2002 was 1.6% higher than the same

period last year and labour income, a key component of personal income, totaled \$3.3 billion in the first six months of the year, 6.2% higher than the first half of 2001.

While most indicators reflect an improving economic situation, the population continues to fall. As of July 1, 2002 the population stood at 531,600 persons, a drop of 0.4%. This is, however, the lowest annual rate of decline recorded since population starting falling in 1994.

Provincial Comparisons

Recent economic growth has allowed the province to gain ground relative to other provinces in terms of per capita measures of well-being. In 2001, Newfoundland and Labrador's per capita real GDP was 95.6% of the Maritime average and 71.5% of the Canadian average. This represented gains of 8.9 and 6.9 percentage points, respectively, since 1997. Similarly, personal income per capita rose from 75.4% of the Canadian average in 1997 to 77.0% in 2001, and from 88.6% of the Maritime average to 89.2% in 2001.

2003 Outlook

Strong economic growth is expected to continue in 2003. On average, private

Economic Indicators

(Annual % change unless otherwise indicated)

	2001	2002f
Gross Domestic Product		
Nominal	-0.1	13.0
Real	1.3	7.5
Personal Income		
Nominal	3.6	4.3
Real	2.5	2.5
Personal Disposable Income		
Nominal	3.8	3.9
Real	2.7	2.1
Retail Sales		
Nominal	9.3	2.9
Real	8.9	1.2
Housing Starts	22.5	23.6
Employment	3.3	1.3
Labour Force	2.6	2.0
Unemployment Rate (%)	16.1	16.7
Population	-0.8	-0.4

f: forecast, Department of Finance, October 2002
Source: Department of Finance; Statistics Canada

sector forecasters are expecting real GDP growth of 4.7%, the strongest among provinces. Investment is expected to fuel growth next year, driven by Voisey's Bay development and White Rose construction.

Visit Our Web Site

for regularly updated forecasts

GDP

www.economics.gov.nf.ca/frcstGDP.asp

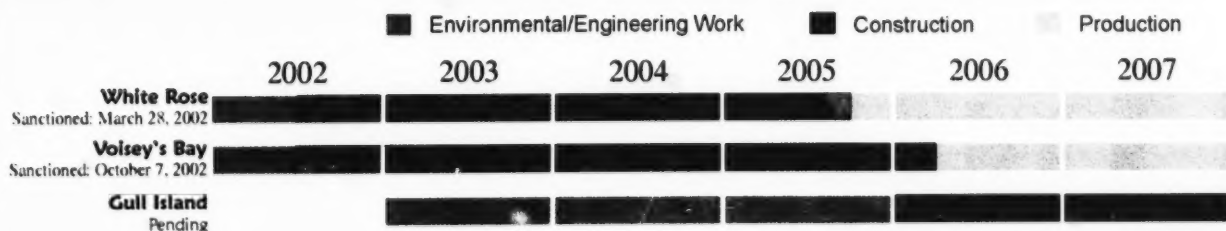
Employment

www.economics.gov.nf.ca/frcstEmp.asp

Selected Indicators

www.economics.gov.nf.ca/frcstSel.asp

Major Project Development



Gull Island hydro electricity production scheduled to commence in late 2011 or 2012

Source: Various sources including Department of Finance

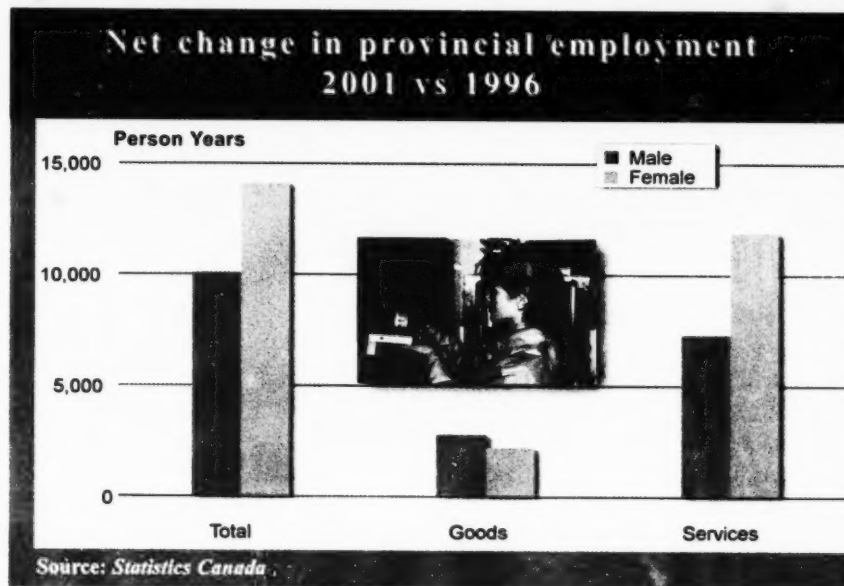
Labour Markets

Labour markets have been on a roller coaster ride this past decade. Employment, after peaking in 1990 at 207,400, fell to 187,000 in 1996. This decline reflected the collapse of the groundfish fishery and government fiscal restraint.

Between 1996 and 2001, employment grew by 13% to a new peak of 211,300 and the unemployment rate fell 3.2 percentage points to 16.1%. This resurgence was led by oil production, fisheries diversification, the emergence of customer contact centres, retail trade, and other general service sector growth.

This period of employment growth, coupled with a decline in the population aged 15+, caused the employment rate (employment as a percent of the population aged 15+) to grow from 42.1% in 1996 to 48.1% in 2001.

The participation rate (those active in the labour force as a percent of the population aged 15+) also trended upward and averaged 57.3% in 2001 compared to a decade low of 52.1% in 1996. This suggests that increased labour demand since 1996 was mostly met by an increase in the labour force. The female participation rate grew faster than the male rate between



1996 and 2001. Almost 60% of the gain in employment over this period accrued to females and most growth occurred in the services sector where females account for the majority of workers.

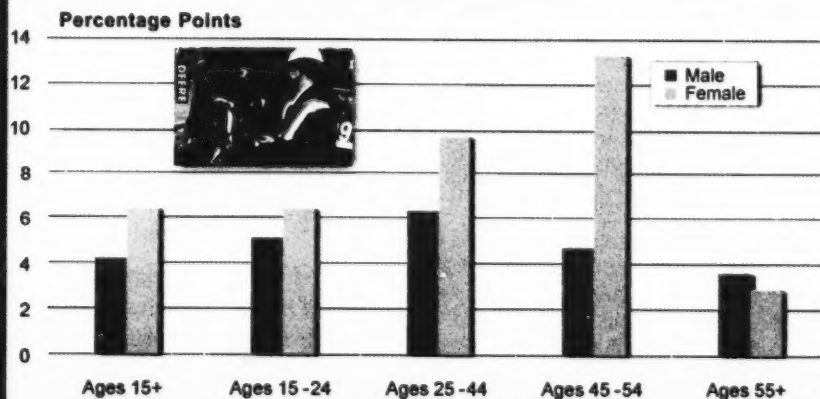
While all regions of the province have benefited from the recent period of growth, some areas have benefited more than others. Employment in the greater St. John's area, for example, is at a record high, however, two areas (South Coast-Burin and Notre Dame-Central Bonavista

Bay) have not seen employment return to the peak levels of the early 1990s. The unemployment rate in the St. John's area, which is generally lower than other Labour Force Survey regions in the province, averaged 9.1% in 2001.

2002 Performance

During the first ten months of 2002 employment in the province was up 1.6% compared to the same time last year. Over this period, however, the province's labour force gains (2.2%) outpaced employment growth. Consequently, the unemployment rate increased 0.4 percentage points, from 16.4% during the first ten months of 2001 to 16.8% in 2002. An increase in the unemployment rate during expansionary times is not uncommon as the province's labour force has, in the past, demonstrated flexibility, expanding and contracting in line with changes in employment.

Participation rate change by gender 1996-2001



Visit Our Web Site

For regular updated employment commentaries:
www.economics.gov.nf.ca/indEmp.asp

Productivity

Productivity measures the quantity of output per unit of labour and/or capital input. Productivity levels indicate how efficiently an industry or economy combines labour and capital to produce goods and services. As such, it is a key determinant of economic competitiveness and living standards.

At the national level, productivity issues have become more prominent in recent years, given a widening productivity gap between Canada and the U.S. In terms of real output per hour worked, for example, the Canadian Centre for the Study of Living Standards (CSLS) reported that, in 2001, Canadian labour productivity was about 81% of the U.S. level, down from almost 90% in the mid 1980s.

In Newfoundland and Labrador, output per hour worked has historically been below the national average. While the province's performance has improved markedly in recent years, driven by the start of offshore oil production, CSLS data indicates that a productivity gap with Canada remains.

Productivity Measures

Productivity and productivity growth are generally driven by four interrelated fac-

tors: capital investment (buildings and equipment), technology, business practices, and the quality and efficient use of labour.

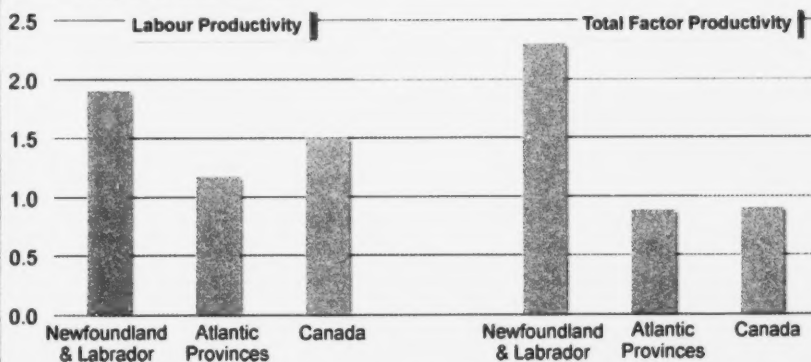
There are two standard measures of productivity: labour productivity and total factor productivity (TFP). Labour productivity, the most widely used measure, is calculated as output (real GDP) per unit of labour input (generally hours worked).

years. Excluding oil, labour productivity in the province is estimated to have declined by 0.2% per year between 1997 and 2001. This drop in labour productivity is likely due to the fact that much of the employment growth throughout this period was in the service sector where output per hour worked is below the average for the economy.

Excluding oil, TFP growth is estimated to have been 0.4% per year since 1997. Gains in TFP were due to more efficient use of capital. This likely stems from a number of factors, including technological improvements and a better educated workforce.

Productivity growth rates 1997 to 2001

Annual Average Growth Rate



Source: Canadian Centre for the Study of Living Standards (www.csls.ca)

In Newfoundland and Labrador, labour productivity has increased strongly over the past five years. From 1997 to 2001, annual labour productivity growth averaged 1.9%. This compared favourably to national growth of 1.5%. Higher growth relative to the national rate has enabled the province to begin to narrow the labour productivity gap with Canada. In 1997, output per hour worked in Newfoundland and Labrador was 84% of the Canadian level—this rose to 85% in 2001.

Total factor productivity is a ratio of the amount of output produced to both labour and capital inputs. TFP growth is a more accurate indicator of efficiency gains since it measures output growth not explained by changes in labour or capital. From 1997 to 2001, this province's average annual TFP growth rate was 2.3% for the total economy, or more than double the national growth rate for the same period of 0.9%.

The development of several major capital intensive projects, such as Voisey's Bay, White Rose and Gull Island, should continue to boost productivity, particularly labour productivity, in the medium term.

Impact of Offshore Oil

Productivity can be positively influenced by several factors including the introduction of new, relatively capital intensive industries. In this province, productivity has been significantly impacted by the emergence of the oil industry. Oil production in Newfoundland and Labrador first occurred in late 1997. Since that time, GDP in oil production has grown from less than \$100 million to almost \$1 billion in 2001, while employment has remained relatively stable over this period.

If oil production were excluded from productivity measures, productivity growth estimates for the rest of the economy would be significantly lower in recent

Oil and Gas

Offshore Production

Oil production is growing more rapidly than initially expected. In 2002, production should total more than 100 million barrels, compared to expectations of 87 million barrels at Budget time. This is almost double the production of 54.3 million barrels last year.

This stellar performance is the result of higher than anticipated production from both Hibernia and Terra Nova. Terra Nova, which started production on January 20, 2002, was expected to produce 29 million barrels this year. Production, however, reached capacity faster than anticipated and the field is now expected to yield about 36 million barrels. Hibernia production has also grown and is now expected to reach 65 million barrels this year versus the expectation of 58 million at Budget time.

White Rose

Husky Energy, the operator of White Rose, announced on March 28, 2002 that the project would move forward utilizing a floating production system similar to Terra Nova. The total capital cost over the life of this project is estimated at \$2.35 billion. First oil is expected before the end of 2005.



Credit: Randy Dawe Photography; Courtesy of Husky Energy

The Seahorse, seen here in St. John's Harbour, began dredging the glory holes for the White Rose project this past summer.

Most major contracts have been awarded. The most significant, in terms of local benefits, is the contract for fabrication and assembly of the topsides for the floating production, storage and offloading vessel. About 80% of the employment associated with building the topsides is expected to take place locally, primarily at the Marystown Shipyard. Employment at the Shipyard is currently about 125 and should ramp up considerably in the new year. By the latter half of 2003, employment on the topsides is expected to peak in the province with between 700 and 1,000 people employed.

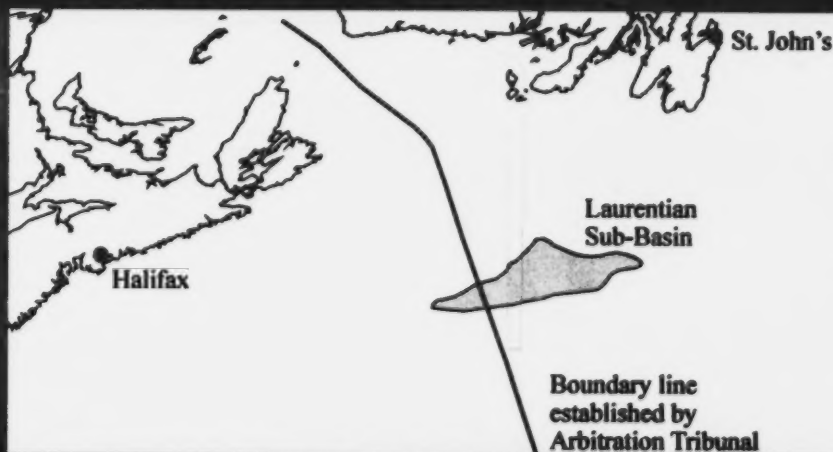
Exploration

Two exploratory wells were spudded by Husky Energy in the Jeanne d'Arc Basin in 2002. Petro-Canada and partners have also indicated that they will drill two deep water wells in the Flemish Pass in 2003.

Exploration is expected to increase in the Laurentian Sub-Basin now that the boundary dispute with Nova Scotia has been settled. Seismic data suggests that this area could yield significant oil and gas reserves. Negotiations to convert existing federal permits into exploration licences have been initiated with area permit holders by the Canada-Newfoundland Offshore Petroleum Board. Because of these negotiations and other factors, there will be no offshore land sale in 2002. There remains, however, about \$500 million in outstanding exploration commitments on the East Coast.

Onshore, the province has called for bids on 13 land parcels on the west coast. The land sale will close on December 13, 2002. This is the first onshore sale since 1996.

The Laurentian Sub-Basin and the established boundary line: March 2002



Source: Department of Mines and Energy

Visit Our Web Site

For the latest in oil production information visit:
www.economics.gov.nf.ca/indOil.asp

Productivity

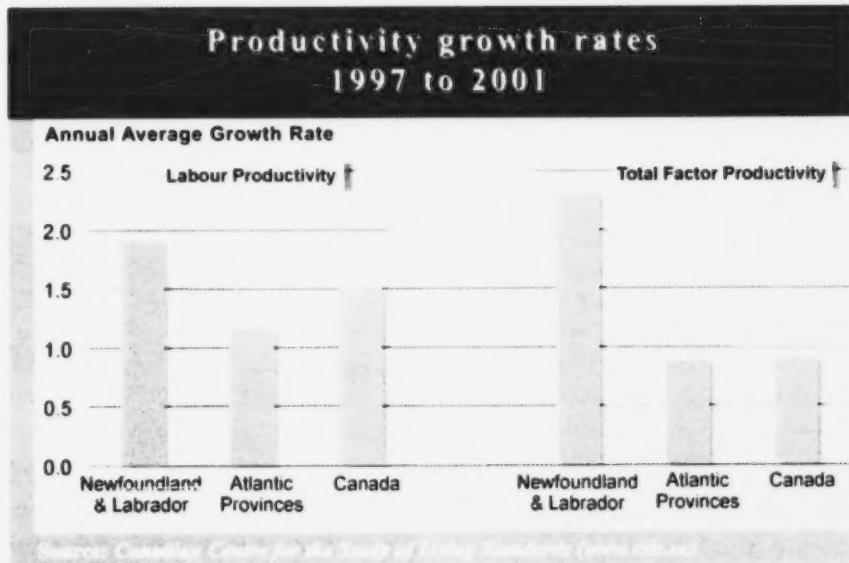
Productivity measures the quantity of output per unit of labour and/or capital input. Productivity levels indicate how efficiently an industry or economy combines labour and capital to produce goods and services. As such, it is a key determinant of economic competitiveness and living standards.

At the national level, productivity issues have become more prominent in recent years, given a widening productivity gap between Canada and the U.S. In terms of real output per hour worked, for example, the Canadian Centre for the Study of Living Standards (CSLS) reported that, in 2001, Canadian labour productivity was about 81% of the U.S. level, down from almost 90% in the mid 1980s.

In Newfoundland and Labrador, output per hour worked has historically been below the national average. While the province's performance has improved markedly in recent years, driven by the start of offshore oil production, CSLS data indicates that a productivity gap with Canada remains.

Productivity Measures

Productivity and productivity growth are generally driven by four interrelated fac-



tors: capital investment (buildings and equipment), technology, business practices, and the quality and efficient use of labour.

There are two standard measures of productivity: labour productivity and total factor productivity (TFP). Labour productivity, the most widely used measure, is calculated as output (real GDP) per unit of labour input (generally hours worked).

In Newfoundland and Labrador, labour productivity has increased strongly over the past five years. From 1997 to 2001, annual labour productivity growth averaged 1.9%. This compared favourably to national growth of 1.5%. Higher growth relative to the national rate has enabled the province to begin to narrow the labour productivity gap with Canada. In 1997, output per hour worked in Newfoundland and Labrador was 84% of the Canadian level – this rose to 85% in 2001.

Total factor productivity is a ratio of the amount of output produced to both labour and capital inputs. TFP growth is a more accurate indicator of efficiency gains since it measures output growth not explained by changes in labour or capital. From 1997 to 2001, this province's average annual TFP growth rate was 2.3% for the total economy, or more than double the national growth rate for the same period of 0.9%.

The development of several major capital intensive projects, such as Voisey's Bay, White Rose and Gull Island, should continue to boost productivity, particularly labour productivity, in the medium term.

Impact of Offshore Oil

Productivity can be positively influenced by several factors including the introduction of new, relatively capital intensive industries. In this province, productivity has been significantly impacted by the emergence of the oil industry. Oil production in Newfoundland and Labrador first occurred in late 1997. Since that time, GDP in oil production has grown from less than \$100 million to almost \$1 billion in 2001, while employment has remained relatively stable over this period.

If oil production were excluded from productivity measures, productivity growth estimates for the rest of the economy would be significantly lower in recent

years. Excluding oil, labour productivity in the province is estimated to have declined by 0.2% per year between 1997 and 2001. This drop in labour productivity is likely due to the fact that much of the employment growth throughout this period was in the service sector where output per hour worked is below the average for the economy.

Excluding oil, TFP growth is estimated to have been 0.4% per year since 1997. Gains in TFP were due to more efficient use of capital. This likely stems from a number of factors, including technological improvements and a better educated workforce.

Oil and Gas

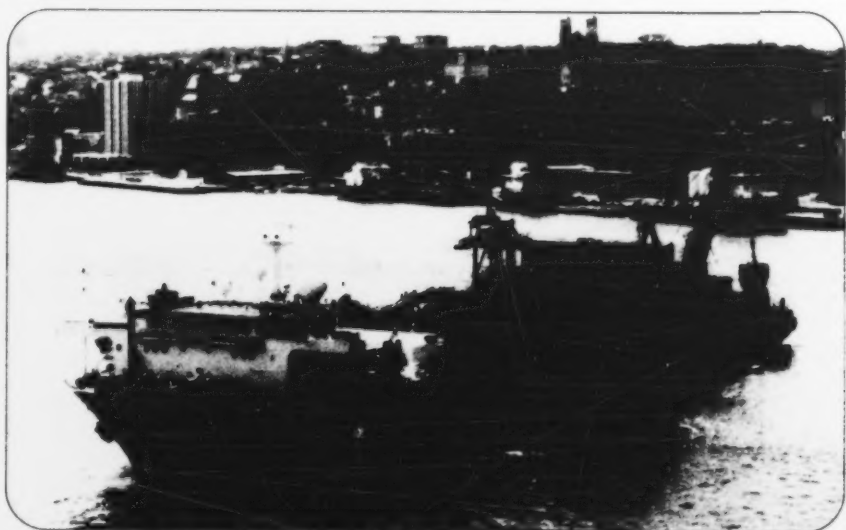
Offshore Production

Oil production is growing more rapidly than initially expected. In 2002, production should total more than 100 million barrels, compared to expectations of 87 million barrels at Budget time. This is almost double the production of 54.3 million barrels last year.

This stellar performance is the result of higher than anticipated production from both Hibernia and Terra Nova. Terra Nova, which started production on January 20, 2002, was expected to produce 29 million barrels this year. Production, however, reached capacity faster than anticipated and the field is now expected to yield about 36 million barrels. Hibernia production has also grown and is now expected to reach 65 million barrels this year versus the expectation of 58 million at Budget time.

White Rose

Husky Energy, the operator of White Rose, announced on March 28, 2002 that the project would move forward utilizing a floating production system similar to Terra Nova. The total capital cost over the life of this project is estimated at \$2.35 billion. First oil is expected before the end of 2005.



Credit: Randy Dawe Photography, Courtesy of Husky Energy

The *Seahorse*, seen here in St. John's Harbour, began dredging the glory holes for the White Rose project this past summer.

Most major contracts have been awarded. The most significant, in terms of local benefits, is the contract for fabrication and assembly of the topsides for the floating production, storage and offloading vessel. About 80% of the employment associated with building the topsides is expected to take place locally, primarily at the Marystown Shipyard. Employment at the Shipyard is currently about 125 and should ramp up considerably in the new year. By the latter half of 2003, employment on the topsides is expected to peak in the province with between 700 and 1,000 people employed.

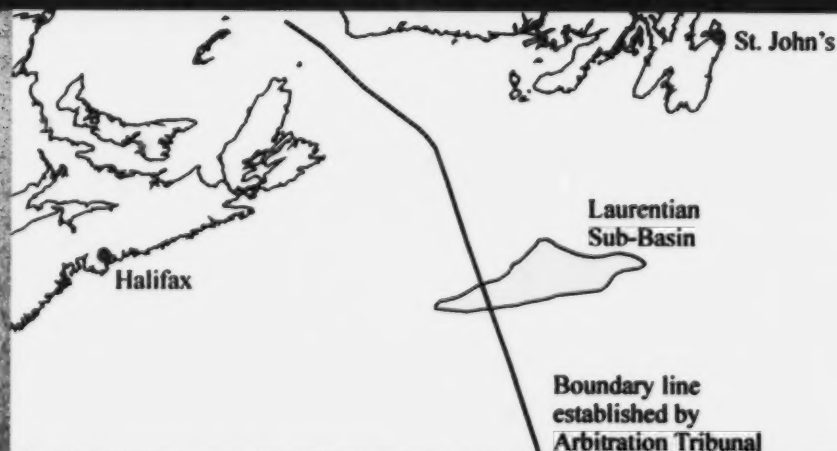
Exploration

Two exploratory wells were spudded by Husky Energy in the Jeanne d'Arc Basin in 2002. Petro-Canada and partners have also indicated that they will drill two deep water wells in the Flemish Pass in 2003.

Exploration is expected to increase in the Laurentian Sub-Basin now that the boundary dispute with Nova Scotia has been settled. Seismic data suggests that this area could yield significant oil and gas reserves. Negotiations to convert existing federal permits into exploration licences have been initiated with area permit holders by the Canada-Newfoundland Offshore Petroleum Board. Because of these negotiations and other factors, there will be no offshore land sale in 2002. There remains, however, about \$500 million in outstanding exploration commitments on the East Coast.

Onshore, the province has called for bids on 13 land parcels on the west coast. The land sale will close on December 13, 2002. This is the first onshore sale since 1996.

The Laurentian Sub-Basin and the established boundary line: March 2002



Source: Department of Mines and Energy

Visit Our Web Site

For the latest in oil production information visit:
www.economics.gov.nf.ca/indOil.asp

Mining

The mining industry continues to experience significant challenges. Over the last few years, shipment values have been adversely impacted by decreased production and lower commodity prices, the result of the global economic slowdown. Value is expected to grow marginally in 2002 to about \$856 million, resulting from higher iron ore shipments. While this represents an increase from \$817 million last year, the value remains below the average of the late 1990s. Iron ore represents over 90% of provincial mineral shipments.

Iron Ore

In the wake of turbulent market conditions, production adjustments continue to be made. For example, iron ore shipments this year are expected to be 19.2 million tonnes. While this will represent an increase of 11% from 2001, it will be lower than peak shipments of 21 million tonnes in the late 1990s.

Weak market conditions resulted in a six week shutdown at the Rio Tinto (IOCC) mine at Labrador City in the third quarter. In September, the company also announced its intention to downsize its workforce by 236 positions over the next two years. Most of this reduction will be achieved through attrition as 45% of the



Credit: Voisey's Bay Nickel Company Limited
Voisey's Bay construction site.

company's workforce is eligible for retirement by 2006. Wabush Mines also responded to the market slowdown by reducing its workforce by 29 permanent employees in late 2001.

Voisey's Bay

Government and Inco formally entered into an agreement to develop the Voisey's Bay mineral deposit on October 7, 2002. The development will include a mine and mill at Voisey's Bay and a processing plant at Argentia. The Argentia facility will initially comprise a pilot hydromet plant followed by construction of a commercial plant. Inco will also establish a \$10 million Innovation Centre

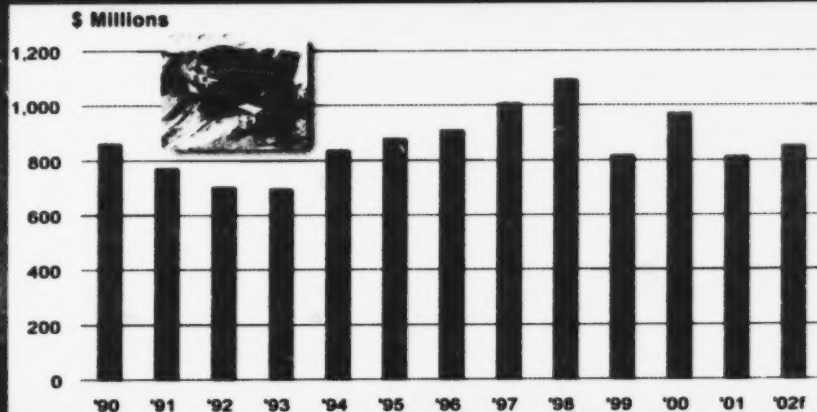
at Memorial University of Newfoundland which will conduct research on mining, exploration and metallurgical processing. In addition, Inco has entered into local benefits agreements with both aboriginal groups in the area.

Construction activity related to the Voisey's Bay project will have significant impacts on economic growth over the next several years. Total employment from the project, including spin-offs, will approximate 300 person years in 2002 and 1,200 person years in 2003.

Production is expected to begin in 2006, the same year that the pilot hydromet plant opens. This pilot facility will test the commercial, technical and economic feasibility of using hydromet technology for Voisey's Bay concentrate. The commercial plant is expected to begin operation in 2012.

To date, Inco has entered into twelve contracts with a total value of over \$30 million. The contracts include services such as camp maintenance; transportation; communication; catering and housekeeping; and medical and security; as well as construction of roads, temporary dock and airstrip.

Value of mineral shipments



Source: Department of Mines and Energy

Gull Island Hydro Project

The Churchill River in Labrador is recognized as a significant supply of renewable energy that has yet to be fully developed. Two potential sites, Gull Island and Muskrat Falls, are located downstream from the existing 5,428 megawatt facility at Churchill Falls. Gull Island, the larger and more economically attractive of the two, has the potential to provide a major boost to the provincial economy over its service life.

During winter/spring 2002, a joint feasibility review was completed with Alcoa, a U.S. based aluminum smelting company, regarding development of the Lower Churchill Hydro potential and establishment of aluminum processing facilities in the province. Concurrently, separate discussions were held with the Government of Québec regarding development of the Gull Island Hydro project. Based on the results of these discussions and the conclusion that the establishment of primary aluminum processing facilities in the province was not economically attractive, the Government of Newfoundland



Credit: Newfoundland and Labrador Hydro
Site of proposed Gull Island Hydro Electric project on the Churchill River.

and Labrador decided to proceed to formal negotiations with Québec.

On August 1, 2002, the Premiers of Newfoundland and Labrador and Québec jointly announced that their respective governments had reached a consensus on the principles to guide formal negotiations for development of the Gull Island Hydro project in Labrador.

The project under consideration has a total estimated cost of \$4 billion (including generation and transmission

facilities in Labrador). The development phase of the project, including an environmental assessment, is expected to take eight to nine years and create several thousand person years of employment. The project will be developed in an environmentally sensitive manner.

The Gull Island production and transmission facilities in Labrador will be owned 100% by Newfoundland and Labrador. In addition, there will be a price escalation provision, that will ensure that the price reflects the value of electricity as it changes over time.

The governments have agreed to work together to maximize economic and employment benefits for both provinces. Project management, engineering, procurement, and employment opportunities will be maximized for the people of Newfoundland and Labrador.

Negotiations are ongoing between the Government of Newfoundland and Labrador and the Innu Nation on an Impact and Benefits Agreement related to the Gull Island development and a land claims accord.

Principles Agreed to August 1, 2002

- Development of a 2000 MW Project
- Newfoundland and Labrador ownership of the production and transmission facilities
- A long term contract that reflects fair value and sharing of project risks, including an escalation provision that will ensure that the price reflects the value of electricity as it changes over time
- Electricity produced by the project sold to Hydro-Québec with recall rights to Newfoundland and Labrador
- Maximizing the economic and employment benefits for both Newfoundland and Labrador and Québec
- Meaningful partnerships with the Innu in the development
- Development in an environmentally sensitive manner

Gull Island Hydro Project

The Churchill River in Labrador is recognized as a significant supply of renewable energy that has yet to be fully developed. Two potential sites, Gull Island and Muskrat Falls, are located downstream from the existing 5,428 megawatt facility at Churchill Falls. Gull Island, the larger and more economically attractive of the two, has the potential to provide a major boost to the provincial economy over its service life.

During winter/spring 2002, a joint feasibility review was completed with Alcoa, a U.S. based aluminum smelting company, regarding development of the Lower Churchill Hydro potential and establishment of aluminum processing facilities in the province. Concurrently, separate discussions were held with the Government of Québec regarding development of the Gull Island Hydro project. Based on the results of these discussions and the conclusion that the establishment of primary aluminum processing facilities in the province was not economically attractive, the Government of Newfoundland



Credit: Newfoundland and Labrador Hydro
Site of proposed Gull Island Hydro Electric project on the Churchill River.

and Labrador decided to proceed to formal negotiations with Québec.

On August 1, 2002, the Premiers of Newfoundland and Labrador and Québec jointly announced that their respective governments had reached a consensus on the principles to guide formal negotiations for development of the Gull Island Hydro project in Labrador.

The project under consideration has a total estimated cost of \$4 billion (including generation and transmission

facilities in Labrador). The development phase of the project, including an environmental assessment, is expected to take eight to nine years and create several thousand person years of employment. The project will be developed in an environmentally sensitive manner.

The Gull Island production and transmission facilities in Labrador will be owned 100% by Newfoundland and Labrador. In addition, there will be a price escalation provision, that will ensure that the price reflects the value of electricity as it changes over time.

The governments have agreed to work together to maximize economic and employment benefits for both provinces. Project management, engineering, procurement, and employment opportunities will be maximized for the people of Newfoundland and Labrador.

Negotiations are ongoing between the Government of Newfoundland and Labrador and the Innu Nation on an Impact and Benefits Agreement related to the Gull Island development and a land claims accord.

Principles Agreed to August 1, 2002

- Development of a 2000 MW Project
- Newfoundland and Labrador ownership of the production and transmission facilities
- A long term contract that reflects fair value and sharing of project risks, including an escalation provision that will ensure that the price reflects the value of electricity as it changes over time
- Electricity produced by the project sold to Hydro-Québec with recall rights to Newfoundland and Labrador
- Maximizing the economic and employment benefits for both Newfoundland and Labrador and Québec
- Meaningful partnerships with the Innu in the development
- Development in an environmentally sensitive manner

Manufacturing

Manufacturing continues to grow as reflected in shipment value, capital investment and employment. Manufacturing shipments in 2002 are expected to grow by 1.5% to about \$2.24 billion, rivaling the record level of \$2.23 billion set in 2000. Investment has been consistently higher in recent years as well—almost \$135 million in construction and equipment spending is expected in 2002. Employment is also doing well. Between 1998 and 2001, employment averaged about 16,600 compared with an average of 13,900 between 1993 and 1997. This year, manufacturing is expected to generate about 18,000 person years of employment.

The largest components of manufacturing are fish processing, newsprint and refined petroleum. Combined, these three are estimated to account for about 60% of output and 65% of employment in the industry.

Provincial initiatives in recent years, including tax holidays and trade missions, have concentrated on diversifying the manufacturing base and targeting export markets. An increased focus on export markets has benefited many non-resource based manufacturers, some of which are profiled below.



Credit: Eric Walsh

Lotek Wireless Inc. of St. John's is a leader in the design and manufacture of electronic fish and wildlife tracking and monitoring systems. The firm, which won the 2002 Canada Export Award for Innovation and Technology, and a 2001 provincial export award, employs 120 people and derives over 90% of its revenues from exports. Above: a demonstration of the use of a directional antenna to determine the location of tagged fish and wildlife near a hydroelectric dam.

Manufacturing for Export

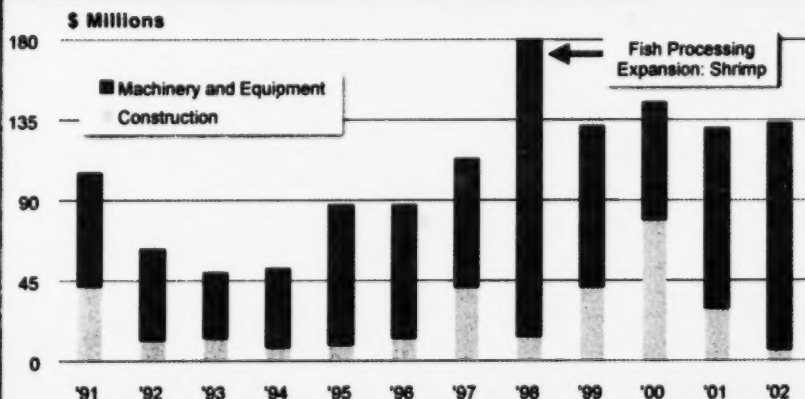
Garrison Guitars began manufacturing acoustic guitars in 2001 using its own patented technology, the Griffiths Active Bracing System™. The company's 20,000 sq. ft. facility, located in Mount Pearl, employs over 60 people and utilizes the latest manufacturing technology. Exporting over 90% of its guitars to international markets, Garrison has won national business and innovation awards, and provincial export and entrepreneurship awards. Garrison has orders in

place for an entire year's production (12,000 units).

Genesis Organic, based in Corner Brook, is one of the fastest growing composting companies in Canada. The company, which employs 30 people, uses advanced composting technology to transform pure organic waste (e.g., wood bark and fish) into high-grade organic soil conditioners. Genesis Organic has established export markets in the United Kingdom and Saudi Arabia, and recently partnered with a Chilean firm to open an organic waste management facility in that country. The firm is pursuing further opportunities in other Latin American countries.

Hygenitek Inc., a specialized dental hygiene manufacturer, announced in September 2002 that it plans to establish a manufacturing facility at Trepassey. The project will initially create 38 jobs. This Ontario-based company, established in 1999, will manufacture dental purification products and antibacterial rinsing and cleaning solutions for international markets. Production is anticipated in early 2003.

Capital investment in the manufacturing industry



Source: Statistics Canada

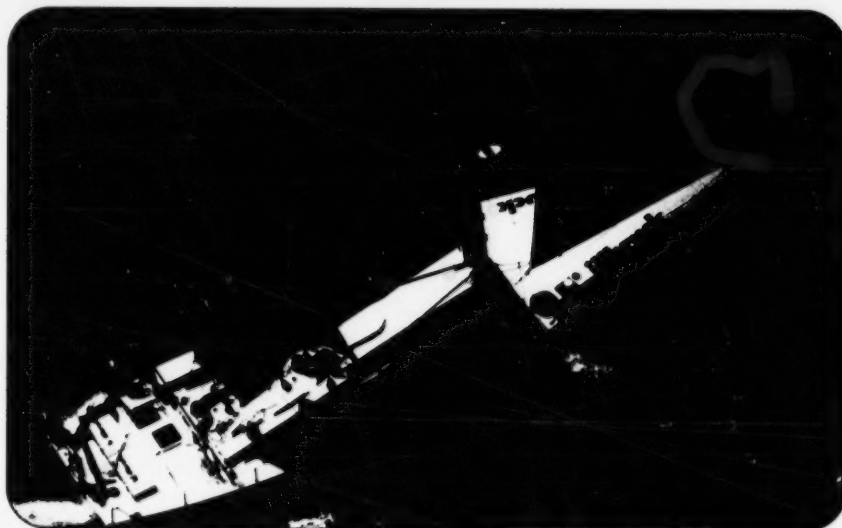
Special Feature R&D

Research and development (R&D) is the foundation for innovation and commercialization of new products and services. Innovation, in turn, leads to higher productivity which improves competitiveness and raises living standards. Expenditures on R&D totaled \$125 million in 1999 (the latest year for which data is available).

The federal government recently established a \$300 million Atlantic Innovation Fund to strengthen the Atlantic region's innovation capacity. The fund will support R&D and commercialization partnerships and alliances. To date, \$45 million (29% of the total allocated to date) has been directed towards this province.

Oceanic Consulting Corporation

Oceanic Consulting Corporation is an ocean engineering firm based in St. John's that provides commercial services in marine performance evaluation to the international marketplace. An alliance of the National Research Council of Canada (Institute for Marine Dynamics), Memorial University of Newfoundland (Ocean Engineering Research Center and Marine Institute), and Marineering



Credit: Daniel Forster
Volvo Ocean Race winner, Illbruck.

Limited, Oceanic is the commercial front door to one of the world's most comprehensive collections of marine research facilities. Research is conducted at world-class facilities such as towing and ice/towing tanks, an offshore engineering basin, a cavitation tunnel, a flume tank, and a marine simulation centre. Founded in 1998, the company maintains offices in St. John's and the United States.

Among other projects, the company has completed model testing on sailing and power yachts, including evaluation work for the America's Cup contender *Alinghi* and for Farr Yacht Design, designer of the winning vessel of the Volvo Ocean Race,

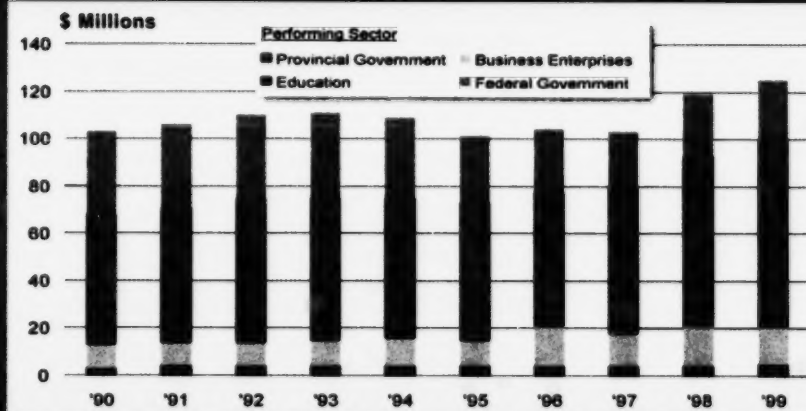
Illbruck. The firm has also completed projects in the energy sector, including tug and barge power and stability projects; oil transfer tug evaluation; and evaluation of deep-water installation vessels. More recently, it has completed work for Husky Energy (i.e., White Rose FPSO).

Biotechnology

Biotechnology is the application of biological systems or processes to create products and services. As such, it is facilitating advancements in areas such as health care, agriculture, aquaculture, and the environment. Biotechnology is emerging in the province with industry and R&D development being fostered through Genesis Bio-East (a division of Memorial University). Initiatives to date have focused on marine biotechnology, pharmaceutical and nutraceutical research, and medicine and human genomics.

Bio-East's goal is to make the province an international centre for marine biotechnology. Towards this end, local marine biotechnology companies, such as A/F Protein Canada, NovaLipids, Newfoundland Aqua Products and Atlantic Marine Products, have commercialized new marine biotechnology products. This work, as well as other R&D activity, will be showcased in 2005 when the province hosts an international marine biotechnology conference.

Over 60% of R&D in the province performed at educational institutes



Source: Statistics Canada

Fishery

2002 Performance

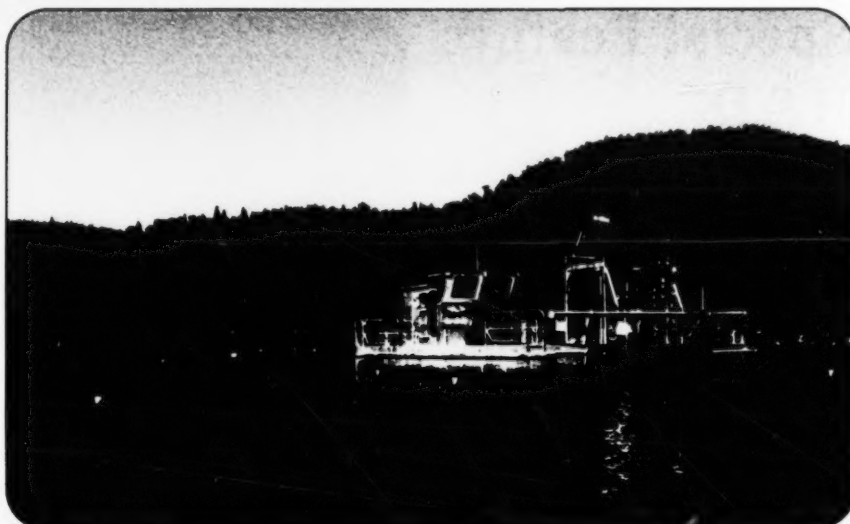
Fish landings are expected to total 260,000 tonnes in 2002, an increase of about 5% from 2001. Similarly, landed value is expected to approach \$500 million, a gain of approximately 4% from the previous year.

Major Species

Crab, shrimp and cod are the main species harvested, accounting for about 60% of landed volume and 80% of landed value. Crab and shrimp dominate the industry, with crab being the most important species overall in terms of value and shrimp in terms of volume.

Crab landings grew marginally in 2002 to 59,000 tonnes. The landed value is estimated at \$230 million, representing an increase of almost 7% from 2001. Strong market prices have translated into higher landed values.

Shrimp landings (inshore and offshore) are expected to be 80,500 tonnes in 2002 (i.e., the quota will be filled), up from about 70,000 tonnes in 2001. This increase is largely due to increased fishing effort. Readers will recall that the fishery was closed for three months in 2001 (July to September) due to weak markets.



Credit: Eric Walsh
Badger Bay Mersel Farm.

Cod landings in 2002 are expected to be on par with last year at approximately 20,000 tonnes. As market prices have been relatively unchanged, landed value (\$30 million) will approximate last year's level as well.

Other landings, encompassing 35 species such as flounder, turbot and herring, are expected to total 100,000 tonnes, on par with 2001. The landed value, however, should increase from \$95 million to \$117 million, largely the result of higher seal product prices.

Exports

The main market for the province's fish

exports continues to be the U.S. (57% of value in 2001), followed by China (10%) in a distant second. However, in 2001, over 60 countries imported some fish products from the province.

Aquaculture

Aquaculture activity continues to expand. Production is expected to approximate 7,000 tonnes this year, up almost 40% from 2001, and production value is expected to jump to \$30 million from about \$20 million last year.

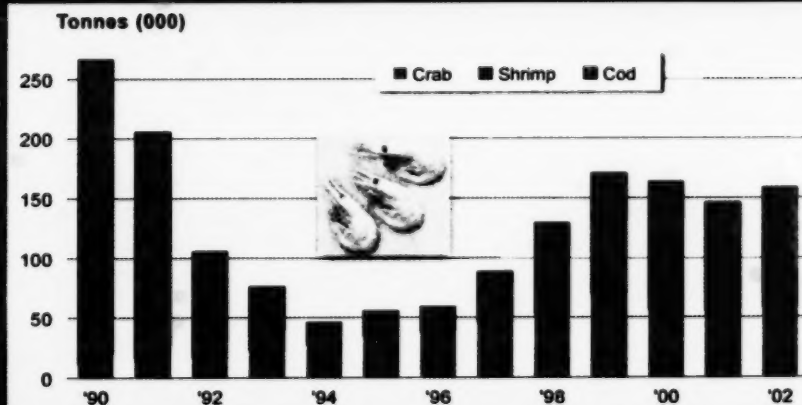
Employment

From January to October 2002, industry employment averaged 17,300 compared to 15,400 for the same period in 2001. Reliance on the fishery, however, is higher than average employment measures would indicate. In 2001, for example, employment averaged 14,600 person years in fish harvesting and processing. However, data from various sources (e.g., taxfile data) indicate that over 30,000 persons have an attachment to the fishery. Clearly, more people rely on this industry for employment and income than standard labour market indicators would suggest.

Visit Our Web Site

For current information on fish landings:
www.economics.gov.nl.ca/indFish.asp

Three main fish species currently harvested



Source: Department of Fisheries and Aquaculture

Tourism

2002 Performance

Non-resident travel this year should be on par with, or slightly higher than, 2001 levels as increases in auto visitors are expected to offset fewer air and cruise travellers.

Auto visitors were up 16% to September and traffic on the Gulf crossing is expected to exceed the record high set in 2000. Air travel continues to be impacted by the lingering effects of September 11 and subsequent airline restructuring: the latest data suggests air passenger traffic may be down by about 7% this year. The number of people travelling on cruise ships is expected to be down by 6% in 2002. Nevertheless, the province did benefit from a significant increase in the number of port calls and passenger stops: port calls went from 69 in 2001 to 90 this year, and passenger visits (stops) increased by 4%.

Tourism's Economic Contribution

Statistics Canada recently estimated that tourism generated \$206 million in direct Gross Domestic Product in the province in 1996, about 2.3% of total GDP. Tourism's share of total employment and



Credit: Robert G. Grantham, Johnson GEO CENTRE, Signal Hill, St. John's

About 85% of the Johnson GEO CENTRE, a world-class geological museum, is located underground. Since opening in June 2002 more than 50,000 people have toured the Centre.

labour income was 3.9% and 2.7% respectively. Although the reference period is somewhat dated, this study provides insight into the contribution of tourism to the economy.

Attractions

The significant investment made to infrastructure over the past decade is providing platforms for new tourism products and experiences. Examples of infrastructure include the convention centres in St. John's and Corner Brook, The Rooms (see page 12), the Johnson GEO CENTRE, the Rising Tide Theatre and

Pageant in Trinity, the Bonne Bay Marine Station and Ocean Observatory and the Red Bay National Historic Site. Red Bay is located in southern Labrador and is the site of a 16th century Basque whaling station. This site stands to benefit from increased tourist activity due to the extension of the highway system along coastal Labrador. In 2002, over 9,800 visitors came to Red Bay, an all-time high.

A Rich Tourism Experience

Special celebrations such as the Access North Labrador 2002 and media coverage from books, films and events such as the Juno Awards have continued to raise awareness of the province as a tourism destination. This is evidenced by the 35% increase in tourism inquiries in 2002. The growth of cultural industries and heritage attractions is providing an enriched visitor experience through living history, interpretative programs, and special events including the Signal Hill Military Tattoo, and living interpretations at L'Anse aux Meadows Norse settlement and Point Amour Lighthouse.



Credit: Courtesy Newfoundland and Labrador Tourism

The Trinity summer festivals, presented by Rising Tide Theatre, interpret the area's history through theatre. The plays have enjoyed growing popularity since their start about 10 years ago. In 2002, an estimated 25,000 visitors were entertained by these performances.

Visit Our Web Site

What are some of the province's past tourism highlights? Look up archived editions of *The Economy* and *The Economic Review* on:
www.economics.gov.nf.ca/mnArchives.asp

Construction

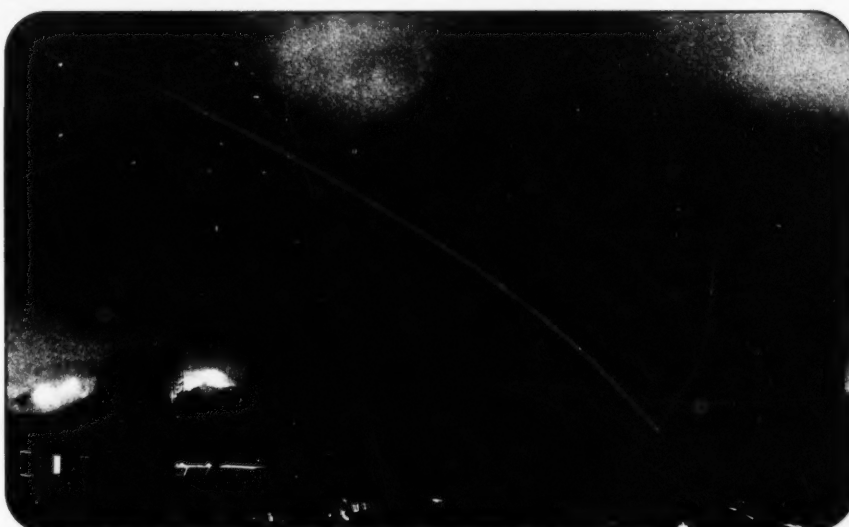
Residential

Housing investment is expected to grow by 11.8% in 2002 to over \$600 million. Of this total, about 65% will be spent on conversions and renovations with the remainder going towards new construction. Housing starts are expected to be up by almost 24% for the year to 2,200, in addition to growth of 22.5% in 2001. The strength in the residential sector is being driven by income growth, low mortgage rates, consumer confidence, and increased construction of multiple units (e.g., condominiums).

Non-Residential

Total non-residential construction investment is expected to be \$1.73 billion in 2002, down slightly from \$1.79 billion in 2001.

Mining and oil and gas extraction is the largest component of non-residential construction investment accounting for over 65% of the total in recent years. Investment in mining and oil and gas extraction will remain significant during the next several years, led by construction activity on the White Rose and Voisey's Bay projects. The Gull Island Hydro Project will further increase activity in this sector over the next decade (see page 7).



Credit: Gerald Crane

"The Rooms", under construction in St. John's, will house the province's museum, art gallery and archives.

Labour Force Development

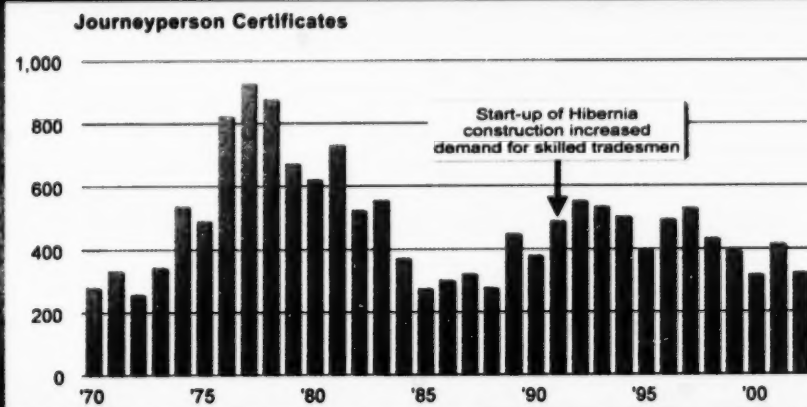
Construction and investment activity have been at record high levels for a number of years. Anticipated increases in activity, coupled with changes of a migratory and demographic nature, are expected to exacerbate labour supply shortages that have already begun to emerge in certain skilled trades. For example, the availability of skilled construction labour has tightened up following a period of strong demand in other provinces such as Alberta and Ontario. Increased opportunities and higher industry wages in other provinces led some construction workers to seek employment elsewhere in Canada during the 1990s. As these economies are expect-

ed to continue to grow, this "draw" on local labour is expected to continue.

Furthermore, younger workers are not entering the industry at the rates witnessed in the past, as evidenced by the downward trend in construction trades certifications. Consequently, the construction labour force is aging. For example, EI data indicates that 38% of construction workers in the province are over age 44, compared to 25% a decade ago, while those less than age 35 have dropped from 49% to 34%. These trends will no doubt affect the industry's ability to meet future labour demand.

In light of this situation and to better enable local firms to compete for labour, wages will likely rise. Also, industry and post-secondary training institutes are responding to these issues by adopting sector-specific approaches to human resource challenges. Examples of these initiatives include the newly established government/industry residential construction industry sector committee and the petroleum industry human resources committee. Both groups have been tasked with finding approaches that will facilitate the necessary adjustments and provide for a better balance between labour supply and demand in their respective industries.

Certificates issued in the construction trades



Source: Department of Youth Services and Post-Secondary Education

Forestry

Newsprint

Newsprint production is expected to decline by about 3% in 2002, the result of poor market conditions and associated production downtime. The drop in production, combined with lower transaction prices, is expected to push shipment value down by more than 20% to about \$530 million.

Newsprint prices are expected to average about US\$468/tonne in 2002, down from an average of US\$585/tonne last year. This past July, prices fell to their lowest level in a decade (US\$445/tonne) before recovering somewhat in the Fall; by October, newsprint was selling for US\$480/tonne. Weak market conditions have resulted in approximately seven weeks of downtime at the Grand Falls - Windsor mill so far this year.

Lumber

The expiry of the Canada - United States Softwood Lumber Agreement in 2001, which protected Canadian lumber producers from U.S. trade action, has indirectly affected lumber production in the province this year. After the agreement expired and the two countries failed to reach a new agreement, Canadian producers increased their exports to the United States in anticipation of the imposition of duties.



*Credit: Department of Forest Resources and Agrifoods
Silage corn crop at Glenview Dairy Farm in Kilbride.*

Consequently, a build-up in U.S. lumber inventories occurred and an oversupply situation developed. As a result, local production has been constrained and 2002 levels are expected to be on par with last year (138 million board feet). A better balance in supply/demand conditions should result in some production gains in 2003.

As an interim measure, the U.S. imposed countervailing and anti-dumping duties totaling 27.2% on Canadian lumber in May of this year. A number of provinces, including Newfoundland and Labrador, are exempt from the countervailing duty and are only subject to the anti-dumping tariff of 8.4%.

Agrifoods

Farm Cash Receipts

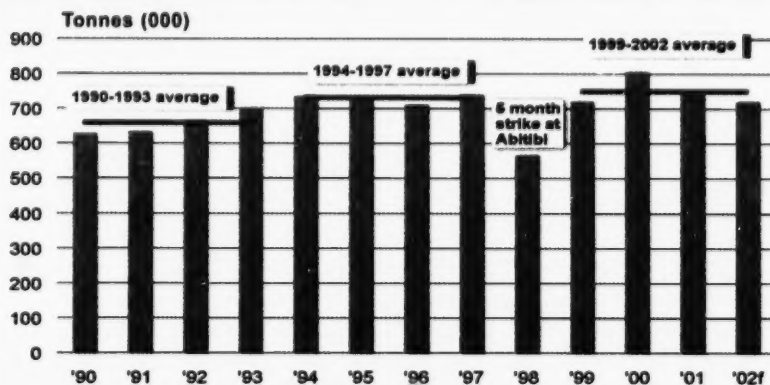
Farm cash receipts for the first six months of 2002 totaled \$39.4 million, on par with 2001. Dairy products, which account for about one-third of total receipts, were up by 3%. Egg production and floriculture/nursery products, which together comprise one quarter of receipts, were up by 10% and 8%, respectively. These gains offset production declines for cattle and chicken.

Silage Corn

Growing corn for livestock feed is gaining increasing interest among local farmers. Feed is the highest expenditure for livestock farmers and silage corn is a high energy, high yield crop which can significantly lower this cost, thereby improving farm profitability.

Recent research initiatives undertaken by the Department of Forest Resources and Agrifoods, in partnership with Agriculture and Agri-Food Canada, have demonstrated that corn can be grown successfully in local climatic conditions. For example, the use of a photo-degradable plastic, at the onset of the planting season when plants can be most susceptible to frost, has allowed corn to mature quicker than would otherwise be the case.

Newsprint shipments



Source: Department of Forest Resources and Agrifoods; Department of Finance